## THE PROLONGATION OF HUMAN LIFE.

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The title of this paper might lead anyone to think that I am the discoverer of some new serum, which, when injected into the body, will have the marvelous effect of prolonging human life. Such is not the case, however, and it is merely my purpose to call your attention to some things which have much to do with the preservation of health and the prolongation of life. None of the suggestions that I have to make are new, but it is my desire to emphasize the need of putting into practice some of our own teachings. Much has been said in the last year or two in various conventions and meetings of this kind about eugenics, and the subject has been discussed from a great many angles. The teaching of eugenics is a step in the right direction, but the putting into practice of this teaching is the only thing that will bring about satisfactory results. to prolong life, then, our first step must be to look after the baby before it is born, so to speak. We must see to it that the parents come from proper ancestry, and that they themselves are fitted mentally and physically to be parents. I have not the time, nor is this the place, to discuss the many ways in which this can be accomplished, but I do want to call attention to one necessary step, and that is a proper marriage law and one that can be enforced, to prevent men and women from entering into the marriage state while they are suffering from any contagious disease. The enforcement of such a law alone would, in many cases, give the child a better start in life than it has today. The best work that is being done for the prevention of infant mortality is the pre-natal work, so-called, which consists, as the name implies, in looking after the baby before birth by giving proper care and attention to the mother. Many other similar steps can be taken besides the two that I have mentioned in the practice of eugenics, all with the same result, that a healthy baby will be born of healthy parents. The next thing in order for the prolongation of human life is to keep the well baby in good health. This is being done in many cities today, and the number is constantly growing. The problem of the prevention of infant mortality is one that is receiving much attention with the result that the deaths in infancy are being very much reduced and lives are daily being prolonged all over this country beyond the first year, before which time many of them have been sacrificed in the past.

Another trying period of life is from infancy to early childhood, say from one to five years of age. During this time many children die of commu-

nicable diseases; but the number is not as large as it was formerly because of the efforts of organized Boards of Health in this respect. It seems to me, however, that the education of the public looking towards the prevention of all manner of diseases during this period of life has been somewhat neglected. Boards of Health care for cases of communicable diseases after they have made their appearance and do what they can to restrict the same, but a step in advance would be for health officials to do work similar to that which is being done for the prevention of infant mortality by sending graduate nurses into homes to teach people how to keep their children well after they have gone beyond one year of age. I am very strongly of the opinion that the best public health work can be done through the agency of the trained nurse, and that by using her on every possible occasion for the purpose of educating the public, much can be done toward the prolongation of human life.

After the child becomes of school age, the state takes control of it to to the extent of requiring its attendance at school, and of late years in most places the state is doing its duty in looking after the health of the school child by a supervision of school buildings and a medical inspection of school children with a view of giving them every possible protection. The examination of all school children for physical defects and the correction of the same is an important factor. Especially is this true as it applies to the correction of defective eyesight and hearing, defective teeth and the correction of pathological conditions of the nose and throat. By means of a system of dental inspection done by dentists and a correction of the defects found, either by private dentists, or in the case of indigent children, by publicly paid dentists in dental clinics, probably the most lasting good is The general health of the children is improved and they accomplished. are taught dental hygiene, which teaching remains with them throughout life and aids greatly in preserving their health.

Another thing that should not be overlooked during childhood and adolescence, is the teaching of sex hygiene. It is an open question, and one which I will not at this time attempt to answer, whether this teaching should be given to the pupils in the schools, or whether it should be administered only by the parents. Whatever may be the answer to that question, the fact remains that children should be taught enough of the physiology and hygiene of the sexual organs to understand the question, and they should be told enough of the prevalence and horrors of venereal diseases to aid them in living moral, upright lives. My own opinion is that this can best be accomplished through the parents or possibly through the family physician. There can be no question but that the teaching of hygiene in general, with special stress laid upon personal hygiene, should form part of the curriculum of all schools before the high school grades are reached. Some states have laws with such a requirement, but the courses

offered in most instances are not sufficiently thorough and comprehensive. During school age, children should be taught how to live in every respect; they should be taught the value of proper exercise, good nutritious food, pure air and proper habits. An education along these lines will be of better service to our children in after life than a mere superficial understanding of the problem of algebra and higher mathematics.

We have now looked after the child from the time before it was born until it starts out in life and is supposed to look after itself. By looking after one's self most people mean the earning of sufficient money to pay for one's daily bread, but looking after one's self in this discussion should include the protection of one's own health. In other words, all men and women who are self-sustaining, and who are not receiving instruction from their elders in this respect, should learn to value their health as their best To do this, they need the aid of a conscientious and careful physician. It has been my preaching for several years, and I desire to emphasize it now, that every person should submit to a physical examination by a competent physician several times each year. How frequently do men, busy in life with their many affairs, find out by an examination on the part of a medical examiner of some insurance company, that they have a disease of the kidneys. This, like many other pathological conditions, comes on insidiously and does not give the victim any particular warning, but the training and knowledge of the skilled medical practitioner enables him to find out that the disease is approaching before it has had an opportunity to do much harm. It is, therefore, necessary that the examination referred to be complete in every detail, so that the earliest symptoms of any possible disease may be detected, and the disease process arrested at once. It is up to the doctors, it seems to me, to bring about this practice of preventive medicine among the people, and it is certainly up to the members of this Association. Most mothers have learned to call in a physician to tell them how to keep their babies well before the babies become diseased. and to some extent they are pursuing the same tactics as applied to their older children, but they themselves assume that they are well so long as they are able to be about and attend to their many duties. Why should not the mother and father demand the same attention for themselves that they are asking for their children? Incipient Bright's disease can be arrested and life prolonged by attention to a proper diet and mode of life. The same can be said of diabetes, and we know, if we know anything in medicine, that tuberculosis in its incipient stage, at a time when it is not recognized by the victim, is a curable disease; at least curable to the extent that the pathological process can be arrested, and the patient's life indefinitely prolonged as far as this disease is concerned. There are many other conditions, which, if allowed to go on without attention to the rules of personal hygiene, will become worse and end in early death, whereas they may

be to some extent corrected, and to a great extent arrested, if proper attention is given them.

There can be no question but that Boards of Health and sanitarians everywhere are trying to awaken the public to the facts which I have enumerated, but in order to make their work more effective, they should have the assistance of the medical profession as a whole, and particularly of those members who are not directly connected with public health work. If the family physician of all the people will teach them the good to be obtained by their practising personal hygiene, it will not be long before the scope of human life will be considerably prolonged.